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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/851,655	05/08/01	ZEHAVI	E QCPA181ACAC

QUALCOMM INCORPORATED  
ATTN: PATENT DEPARTMENT  
5775 MOREHOUSE DRIVE  
SAN DIEGO CA 92121-1714

TM02/0809

EXAMINER

NGUYEN, P

ART UNIT

PAPER NUMBER

2663

DATE MAILED:

08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/851,655

Applicant(s)

LAROCCA ET AL.

Examiner

Phuongchau Ba Nguyen

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 5-8-2001 APPLICATION.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

1. Claims 4-5 are objected to because of the following informalities: the term "configured to" should be deleted/removed from claims 4-5, because the limitation recites after the term "configured to" is not a positive recitation/limitation. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 4-5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 4 recites "*a transmitter configured to ones of said variable rate packets which include less than said threshold number of data symbols over a first of said traffic channels*", which is not found in the original disclosure.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 is not clear what is meant by "*a transmitter configured to ones of said variable rate packets which include less than said threshold number of data symbols over a first of said traffic channels*". Please clarify how a

transmitter configured to become "*ones of said variable rate packets which include less than said threshold number of data symbols over a first of said traffic channels*".

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 2-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,777,990.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 34 and 35 merely broaden the scope of the patented claim 1 by eliminating the limitation of non-orthogonal PN sequences. It would have been obvious to a skilled artisan to eliminate the limitation of non-orthogonal PN sequence from modulation means of claim 1 because using the orthogonal modulation sequence is a common practice to reduce interference for better quality signals. It has been held

that the omission an element and its function is an obvious expedient if the remain elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also n-ote *Ex parte Rainu*, 168 USPQ (Bd.App. 1969); Omission of a reference's element whose function is not need would be obvious to one skilled in the art.

8. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 of copending Application No. 08/937,052. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claim 1 merely broaden the copending application claims 1 and 3 by eliminating the "using a first PN sequence and a sequence of a first set of orthogonal sequence" from the traffic demodulator means of the copending application claims 1 and 3, and eliminating the "using a second PN sequence and a second sequence of the first set of orthogonal sequences; and dynamically allocated based on whether the variable rate packets of data symbol exceed a threshold number of said day symbols, wherein the first PN sequence is temporally offset and non-orthogonal to the second PN sequence" from the overflow demodulator means of the copending application claims 1 and 3. It would have been obvious to eliminate from the traffic and overflow demodulators of the copending application claims 1 and 3 the detailed limitation (the eliminated limitations above) of how the demodulators worked to simplify the circuitry of the traffic and overflow demodulators for cost saving purpose. It has been held that the omission an element and its function is an obvious expedient if the remain elements perform the same

Art Unit: 2663

function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ (Bd.App. 1969); Omission of a reference's element whose function is not need would be obvious to one skilled in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

10. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al (5,583,851).

As to claims 2-5, U.S. patent No. 5,583,851 Kato discloses a separating circuit 24 (channel packetizer means) for receiving variable rate data time units (packets) and dividing the data in each variable rate data time unit having nBpbs into a plurality of fixed rate time units (traffic packet and overflow packet) having Bbps; see col.4, line 59, to col.5, line 6. The claimed transmission means reads on the spread modulators 30 the shown in Fig.6 which use orthogonal speed codes W(t) and PN codes as in claims 3 and 5.

As to claim 1, the claimed traffic demodulator and overflow demodulator read on the despreaders 32 which use orthogonal spread codes  $W(t)$  and PN codes. The multiplexer 33 meets the claimed combiner [see figure 6].

11. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Turban (5,373,502).

Turban discloses a transmitter including a demultiplexing DEM1 (channel packetizer), summer 50 for transmitting data over the wireless channel 54, modulator Cod, demodulator Dec and multiplexer MUX2. Each time unit in which data are transmitted on line 26 corresponds to a packet. Likewise, each time unit in which data are transmitted on lines 28 corresponds to a traffic or overflow packet. See figures 1-2, column 4, lines 15-52, and column 6, lines 6-28.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 703-305-0093. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Application/Control Number: 09/851,655

Art Unit: 2663

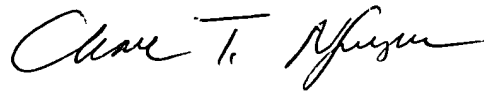
Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



Phuongchau Ba Nguyen  
Examiner  
Art Unit 2663

August 4, 2001



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600